B. 8. Coastal Stormwater Management Regulations

Coastal stormwater control has become an increasingly important issue as development continues. The initial debate focused primarily on stormwater and the closure of shellfish waters. In November 1986, the EMC adopted rules which required new development in a limited zone (575 feet) around Class SA (shellfish) waters to control stormwater either by limiting density or completely controlling a 4.5 inch, 24-hour storm with the use of a stormwater treatment system. The regulations applied to development activities which required either a CAMA major permit (through the NC Division of Coastal Management) or a Sediment/Erosion Control Plan (through the NC Division of Land Resources). The design storm, low-density limits, and areal coverage were all quite controversial and the adopted rules represented a compromise by all parties. A sunset provision was added to the rules to force the NC Division of Environmental Management (and Commission) to reconsider the rules after a year. The original rules expired December 31, 1987.

New stormwater regulations with an effective date of January 1, 1988 were subsequently adopted with similar requirements except the design storm was changed to the 1.5 inch, 24-hour storm. The new regulations apply the stormwater controls to development activities within all 20 CAMA coastal counties, and so includes those counties surrounding the Albemarle-Pamlico estuary system. While the near-water impact of stormwater is very important, as addressed in the original rules, the cumulative impact of stormwater runoff throughout the coastal zone also needed to be addressed. Therefore, the expanded area of coverage helps provide protection of both shellfish waters and general coastal water quality.

Other major items specified in the new rules address the sizing of stormwater treatment systems, innovative infiltration systems, and low-density options. For developments adjacent to SA waters, infiltration systems must be able to retain runoff from 1.5 inches of rainfall in 24 hours; whereas, development in other areas must control only 1 inch of rainfall. Wet detention ponds are not allowed for stormwater control near SA waters and must be sized for 85-90% total suspended solids removal in other areas. Porous pavement is considered an innovative infiltration system (only five are to be allowed until they are proven to work), but evidence regarding its effectiveness in coastal areas has not yet been provided. A low-density option of the new regulations applies a "built-upon" limit of 25% for SA areas and 30% for other coastal areas. Development exceeding these levels is required to have an engineered stormwater system.

B. 9. Section 319

The federal Water Quality Act (WQA) of 1987, which was essentially the reauthorization of a similar act passed in 1972, emphasized nonpoint source pollution control as well as conventional point source control. According to Section 319 of the WQA, each state must develop strategies for managing nonpoint source pollution. In North Carolina, the Water Quality Section of the NC Division of Environmental Management was designated as the coordinating agency for nonpoint source pollution management.

Two reports were prepared in fulfillment of Section 319 (NC Division of Environmental Management 1989a, 1989b). The first report focuses on identifying the causes and sources of nonpoint source (NPS) pollution for impaired waterbodies in the Albemarle-Pamlico Estuarine area. The second report emphasizes management strategies and programs to address the nonpoint source problems identified in the assessment report. The NPS Management Program balances two priorities. One priority is to implement the overall NPS Program which includes regulations, technical and financial assistance, and educational efforts. The second priority involves targeting specific watersheds to improve degraded water quality or minimize nonpoint source impacts on high quality waters. Ideally, the watersheds selected are ones which can demonstrate water quality benefits from NPS projects within the four-year time span